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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,407

05/02/2006

Ian Hynd

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1097

21874

7590

03/23/2010

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EXAMINER

ROBINSON, RYAN C

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

03/23/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,407	Applicant(s) HYND ET AL.	
	Examiner Ryan Robinson	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-8,10-21 and 31-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,5,6 and 31-39 is/are rejected.
- 7) ☒ Claim(s) 1,7,8 and 10-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/21/2006; 8/28/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed on 3/4/2010, with respect to reconsideration of the previous rejection have been fully considered and are persuasive. The finality of the Office Action mailed on 12/4/2009 has been vacated.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 31-33, 35, 37, and 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Corsaro et al., U.S. Patent No. 6,788,794, filed on 10/1/2002, (hereby Corsaro).**

4. As to claim 31, Corsaro discloses a driver apparatus for driving a distributed mode loudspeaker (Fig. 1b), the driver apparatus comprising: an actuator (12) operable to move in dependence on an acoustic signal; and a coupler (13) formed of a resilient material (Col. 3, line 51), the coupler (13) being configured to, in use, couple movement

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of the actuator (12) to an acoustic radiator (10) to cause the acoustic radiator (10) to operate in a distributed mode fashion, in which the coupler (13) has a Shore A hardness of no more than 20 (Col. 6, lines 9-11).

5. As to claim 32, Corsaro remains as applied above. Corsaro further discloses that the coupler (13) engages with the actuator (12).

6. As to claim 33, Corsaro remains as applied above. Corsaro further discloses that the coupler (13) is configured to engage with the acoustic radiator (12).

7. As to claim 35, Corsaro remains as applied above. Corsaro further discloses that the actuator (12) is operative in dependence upon an electrical signal (Col. 4, lines 12-16).

8. As to claim 37, Corsaro remains as applied above. Corsaro further discloses that the resilient material comprises a polymer (Col. 3, line 51).

9. As to claims 5 and 6, Corsaro remains as applied above. Corsaro further discloses that the coupler has a Shore A hardness between substantially 5 and substantially 15, and a shore A hardness of 10 (Col. 6, lines 9-11).

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10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 31, 34 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Hynd, et al, WIPO Publication No. WO 2002/074006, published on 9/19/2002, (hereby Hynd).

12. As to claim 31, Hynd discloses a driver apparatus for driving a distributed mode loudspeaker (Fig. 4), the driver apparatus comprising: an actuator (11) operable to move in dependence on an acoustic signal; and a coupler (13) formed of a resilient material (Page 5, lines 25-26), the coupler (13) being configured to, in use, couple movement of the actuator (11) to an acoustic radiator (15) to cause the acoustic radiator (15) to operate in a distributed mode fashion, in which the coupler (13) has a Shore A hardness of no more than 20 (The coupler can be a liquid, which inherently has a Shore A hardness of 0).

13. As to claim 34, Hynd remains as applied above. Hynd discloses that the coupler (13) defines a substantially planar surface configured to engage with a surface of the acoustic radiator (15).

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14. As to claim 39, Hynd remains as applied above. Hynd further discloses that the coupler defines a substantially planar surface that is configured to removably engage with a surface of the acoustic radiator (16) (Page 4, lines 21-24).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 38 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corsaro et al., U.S. Patent No. 6,788,794, filed on 10/1/2002, (hereby Corsaro).

17. As to claims 38 and 2, Corsaro does not explicitly disclose that the resilient material comprises a gel, which is a hydrogel. Examiner takes official notice that hydrogels were known in the art having the required properties of the strips disclosed by Corsaro, as an art recognized equivalent. Therefore, it would have been obvious to one of ordinary skill in the art, to use a hydrogel as the resilient material, as a design choice.

18. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hynd, et al, WIPO Publication No. WO 2002/074006, published on 9/19/2002, (hereby Hynd).

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19. As to claim 38, Hynd remains as applied above. Hynd does not explicitly disclose that the actuator comprises a moving coil actuator. However, Hynd does teach that the moving coil actuator is a standard loudspeaker. Examiner takes official notice that it was well known to provide a magnetic coil actuator in a standard loudspeaker. Therefore, it would have been obvious, at the time of Applicant's invention, to provide a moving coil actuator, as the loudspeaker of Hynd.

Allowable Subject Matter

20. Claims 1, 7-8, and 10-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

21. The following is a statement of reasons for the indication of allowable subject matter: Dependent claim 1, on which claims 7-8 and 10-21 depend, recite the unique feature of a substantially rigid planar member attached to the voice coil and disposed between the voice coil and the first surface. The closest prior art (Hynd) discloses that the member attached to the voice coil is that of a cone. Although Hynd does teach a separate planar member (14), it is not attached to the voice coil, and is not between the voice coil and a first surface of the coupler (13).

Conclusion

The prior art made of record

- a. US Patent Number **6,788,794**
- b. WIPO Publication Number **WO 2002/074006**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan C. Robinson whose telephone number is (571) 270-3956. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/R. R./

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/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614